RESEARCH ARTICLE

INFLUENCE OF HEALTH RELATED PHYSICAL FITNESS ON ADJUSTMENT LEVEL OF SCHOOL GIRLS OF DIFFERENT SOCIO-ECONOMIC STATUS

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ABSTRACT

In the present study, an attempt has been made to find out that whether the adjustment capacity of school going girls in different socio-economic status influenced by their health related physical fitness or not. Total95girls were selected for the study. Two higher secondary schools of South 24 Paraganas district in West Bengal were selected for the study. In this study the present researchers considered adjustment level as dependent variable and Health Related Physical Fitness as independent variable. The data was collected by use adjustment level questionnaires by Sinha and Singh and Socio economic were measured through the kuppuswamy questionnaire of latest version. Health related physical fitness components were BMI was measured by Weight (kg.)/Height^2 (mtr.)**,** Upper Body Strength Endurance measured by maximum duration of flex arm hang**,** Abdominal Strength Endurance measured by no. of curl ups in one minute**,** Flexibility (FLX) measured by v-sit and reach test and Cardio Respiratory Endurance (CRE) measured by 1500 meter run/walk test. The data were analyzed with the help of statistical procedures. Mean, standard deviation (S.D), and correlation coefficient were employed. Adjustment level of lower middle class has a very weak negative correlation with Cardio Respiratory Endurance (r = -0.055), significantly negative correlation found with flexibility (r =-0.776**)**. But in case of other health related fitness variables i.e. Upper Body Strength Endurance (r = 0.209), Abdominal Strength Endurance(r = 0.325), Body Mass Index(r = 0.023) positive but not significant correlations were found respectively. The Adjustment level of upper lower class with Cardio Respiratory Endurance (r = -0.046), Flexibility (r = -0.165), Upper Body Strength Endurance (r = -0.165) and Abdominal Strength Endurance (r = -0.038)of girls students negative correlation were found respectively. But in case of BMI it has significant positive relation (r = 0.318**)** was found. In this study we concluded that adjustment level significantly influenced by flexibility and BMI.

INTRODUCTION

The students enrolled in secondary classes are experiencing the 'storms and stresses' of adolescence, a very critical stage of their lives. During this period, they keep vacillating between being childhood and being adolescents. Though adjustment is a major concern at all stages of life, it becomes especially critical at the stage of adolescence. Being a phase of rapid growth and development during which physical, sexual and emotional changes occur, adjustment problems are at their peak during this period. Most adolescents experience adjustment difficulties in emotional, social and/or educational aspects of their lives. Adjustment has been described by the Encyclopedia Britannica as a behavioral process for maintaining equilibrium among one's needs and obstacles offered by the environment. Adjusting to constant changes in their internal as well as external environment becomes a major challenge for the adolescents.

It seems, over the years, very limited amount of research has been done on adjustment problems of adolescents. Most of the problems centering adolescents are physical appearance, health and physical development, marks scored, relationship with members of their families, their teachers, and peer of both sexes and home adjustment. This maladjustment may lead to absenteeism, truancy, low achievement and other unworthy habits of children (Subramanyam, 1986). There is a need to explore the adjustment problems of school going adolescents and the influence of various demographic factors on their adjustment abilities. The present study was aimed at exploring the adjustment problems of secondary school students. Adolescence is a transition from childhood to adults wherein children feel a great storm and stress from various aspects. They are expected to be behaving like adults while they are still longing for their childhood wishes from inside.

This internal conflict, when overcome by proper guidance and support from all sectors leads to successful adolescence. Where such guidance is lacking, this transition period ends up in severe adjustment problems such as depression, scholastic backwardness and even anti-social behavior.

Objectives of the study

The objectives of the present study will be as follows:

- To study the present Adjustment status of Girls school students.
- To study the present Health related physical fitness status of Girls school students.
- To classify the Girls students in different socioeconomic status.
- To find out the influence of health related physical fitness on adjustment level in different socio-economic status of Girls school students.

Selection of Subjects: Total 85 girls' students were considered and the subjects were selected from secondary girls' school students studying in class viii only and having the age ranged between 13^+ - 14 years. The West Bengal Board of Secondary Education (W.B.B.S.E) affiliated secondary school students particularly located at the district South 24paraganas was considered for the study.

Selection of Variables: In consultation with the experts of the field, reviewing the literature and considering the feasibility especially from the point of view of availability of equipment's and time factor the following anthropometric physiological and psychological measurements were selected for the study.

Criterion Measures

Anthropometric Measures: Height and Weight (Height was measured by measuring steel tape and weight measured by weighing machine).

Health Related Physical Fitness

- BMI: Measured by Weight (kg.) /Height^2 (mtr.)
- Upper Body Strength Endurance (UBSE): Measured by duration of flexed arm hang in seconds.
- Abdominal Strength Endurance (ASE): measured by maximum no. of curl ups in one min.
- Flexibility: measured by V-sit and reach test.
- Cardio Respiratory Endurance (CRE): measured by 1500 mtr. run/walk.

Socio economic Status: Socio economic status was measured through the (kuppuswamy) questionnaire. Adjustment Level: Adjustment levels were measured through the (Sinha& Singh) questionnaire.

Statistical procedure: After collections of data, the results of the study were obtained by calculating mean, S.D. and coefficient of correlation by the help of Ms-excel -2010 version.

RESULTS AND DISCUSSION

Table no.1 shows that the mean and S.D. of socio economics status of girls of lower middle and upper lower class werewas12.55 ± 1.09 and 7.62 ± 1.85 respectively and the mean and S.D. of adjustment level of the students of lower

middle class and upper lower class were16.95 ± 4.72and15.38 ± 4.71respectively. From the above table no. 2, the mean and S.D. of BMI of lower middle class was 19.31kg. /mtr^2.and 6.46 kg. /mtr^2. The mean and S.D. of Upper Body Strength Endurance of lower middle class of girls was 49.4 sec. and 32.85 sec. The mean Abdominal Strength Endurance of lower middle class of girls was 19.05 and standard deviation was 8.00 and mean of Flexibility and Cardio Respiratory Endurance were 28.45cm. and 13.00 min. and corresponding S. D. were 9.70cm. and 5.23 min. respectively. The mean and S.D. of BMI of upper lower class was 18.29kg. /mtr^2. and 3.82 kg. /mtr^2. The mean and S.D. of Upper Body Strength Endurance of upper lower class of girls was 67.24 sec. and 49.31 sec. The mean Abdominal Strength Endurance of upper lower class of girls was 20.38 and standard deviation was 8.43 and mean of Flexibility and Cardio Respiratory Endurance were 27.83cm. and 13.39 min. and corresponding S. D. were 6.87cm. and 3.40 min. respectively. From the above table no. 3 shows that Socio economics status of lower middle class has a very weak positive correlation with Adjustment level(r = 0.066) of girls students. Socio economics status of upper lower class has a very weak negative correlation with Adjustment level(r = -0.119) of girls students.

The above table no.4 shows that Adjustment level of lower middle class has a very weak negative correlation with Cardio Respiratory Endurance (r = -0.055) of girls students and significantly negative correlation found with flexibility (r =-0.776). But in case of the other health related fitness variables i.e. Upper Body Strength Endurance (r = 0.209), Abdominal Strength Endurance(r = 0.325), and Body Mass Index (r = 0.023) no significant but positive correlations were found respectively. On the other hand the co-efficient of co-rrelation of Adjustment level of upper lower class girls with Cardio Respiratory Endurance (r = -0.046), Flexibility (r = -0.165),Upper Body Strength Endurance (r = -0.165) and Abdominal Strength Endurance (r = -0.038) negative correlation were found respectively. But in case of BMI it has significant positive relation (r = 0.318). Table no. 4 indicated that in both classes Cardio-Respiratory Endurance (CRE) does not have any influence on adjustment level of the girl students. With flexibility significant negative correction found in lower middle group indicates that adjustment level influenced negatively by flexibility. Upper body strength endurance and Abdominal Strength Endurance have no influence on adjustment level in both the class. BMI influence the adjustment level positively and significantly in upper lower group of girls.

DISCUSSION

There are so many evidences about the influence of socio-economic status upon one's health related physical fitness level. The adjustment level also depends upon different factors such as the economic condition, family culture, environmental factors, political situation etc. and all these factors also influences the lifestyle and hence the health related physical fitness. In this study the investigator have tried to found the influence of different health related physical fitness on adjustment level on different socio economic class. Socio-Economic Status was significantly associated with physical fitness. At some age levels girls from the high Socio Economic group performed better for power (Freitas *et al.,* 2010). Although Higher poverty, land inequality and low caste composition of the poor was associated with negligible adverse

Name of the variables			
Anthropometric characteristics	Health related Physical fitness	Psychological variable	Sociological variables
Age	Cardio-respiratory Enduranceof the subjects		
Height	Flexibility level of the subjects		
Weight	Upper body strength Endurance of the subjects	Adjustment level of the students	Socio-economic status
BMI	Abdominal strength Endurance of the subjects		

Table 1. Mean and S.D. of Adjustment level of the different socio-economic status

Variables	Socio-economic status of Girls	
	Lower Middle class	Upper Lower class
	Mean ± S. D.	Mean ± S. D.
Socio Economic Status	12.55 ± 1.09	7.62 ± 1.85
Adjustment level	16.95 ± 4.72	15.38± 4.71

Table 2. Mean and S. D. of Health Related Physical Fitnessof the different socio-economic status

Variables	Socio-economic status of Girls	
	Lower Middle class	Upper Lower class
	Mean ± S. D.	Mean ± S. D.
BMI (kg. /mtr.^{2})	19.31 ± 6.46	18.29 ± 3.82
Upper body Strength Endurance (in sec.)	49.4 ± 32.85	67.24 ± 49.31
Abdominalcurls ups (in no.)	19.05± 8.00	20.38 ± 8.43
Flexibility(cm.)	28.45 ± 9.70	27.83 ± 6.87
Cardio-Respiratory Endurance(mins)	13.00 ± 5.23	13.39± 3.40

Table 3. Correlation coefficient of Adjustment Level with different Socio- economics status

	SES Category		Adjustment Level
		Socio-economic Status	'r' value
Girls	Lower Middle		0.066
	UpperLower		-0.119

0.05% level of significant

Table 4. Correlation coefficient of Adjustment Level of different socio economics status groups with Health-Related Physical Fitness

Girls	SES Category		Health Related Physical Fitness				
			CRE	FLX	UBSE	ASE	BMI
	Lower Middle	Adjustment Level	-0.055	-0.776*	0.209	0.325	0.023
	Upper Lower		-0.046	-0.165	-0.165	-0.038	0.318*

0.05% level of significant

effects on targeting of private goods to the poor within villages, but with lower employment generation out of allotted funds, and significantly lower allocation of resources to the village as a whole. Political competition or literacy levels among the poor were not systematically related to targeting (Bardhan P 2006). Socioeconomic status is positively associated with physical fitness in European adolescents independently of total body fat and habitual physical activity (Jimenez Pavón D and Ortega, F B 2010).Not only singles factors but show the specific SES attributes that might influence BMI (Basto-Abreu A 2018). In a study found that low economic status positively associated with higher BMI among girls in junior high school in Japan because of health policies discourage breakfast skipping might be effective for countering the relation between poverty and overweight in adolescent girls (Mizuta, A2016).In the present study moderate correlations has existed but that was not significant.

Conclusion

According to results of the study following conclusions were drawn: No significant relation was found of adjustment level with Cardio-respiratory Endurance in case of the students of Lower middle socio economic group.

- Significant relation was found of adjustment level with flexibility in case of the students of Lower middle socio economic group.
- No significant relation was found of adjustment level with upper body strength endurancein case of the students of Lower middle socio economic group.
- No significant relation was found of adjustment level with abdominal strength endurancein case of the students of Lower middle socio economic group.
- No significant relation was found of adjustment level with body mass index in case of the students of Lower middle socio economic group.
- No significant relation was found of adjustment level with cardio respiratory endurancein case of the students of upper lower socio economic group.
- No significant relation was found of adjustment level with flexibilityin case of the students of upper lower socio economic group.

- No significant relation was found of adjustment level with upper body strength endurancein case of the students of upper lower socio economic group.
- No significant relation was found of adjustment level with abdominal strength endurancein case of the students of upper lower socio economic group.
- Significant relation was found of adjustment level with body mass index in case of the students of upper lower socio economic group.

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